

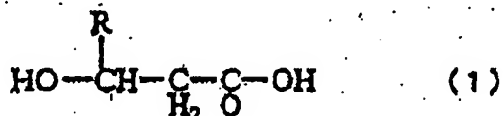
claims 9, 12, 13 amended

Am. 5/6/2005

AMENDMENTS TO THE CLAIMS:

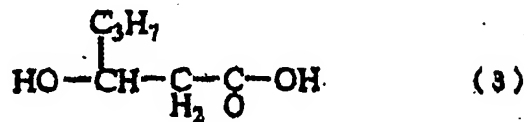
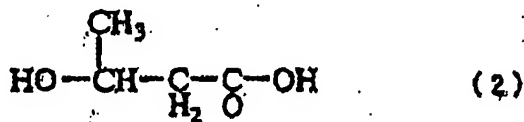
Please amend the claims as shown below. The pending claims are as follows.

1. (Currently amended) A transformant  
wherein at least one gene expression cassette, comprising a polyester  
synthesis-associated enzyme gene, a promoter and a terminator, has been introduced into a yeast  
which belongs to any of the genera *Candida*, *Hansenula*, *Kluyveromyces*, *Phaffia*, *Pichia*,  
*Schizosaccharomyces*, *Schwanniomyces*, *Trichosporon*, and *Yarrowia*.
2. (Previously presented) The transformant according to Claim 1  
wherein a polyester which is obtained using said gene expression cassette is a copolymer  
resulting from the to copolymerization of 3-hydroxyalkanoic acids of the following general  
formula (1);



in the formula, R represents an alkyl group.

3. (Previously presented) The transformant according to Claim 1  
wherein a polyester which is obtained using said gene expression cassette is a copolyester  
resulting from the copolymerization of 3-hydroxybutyric acid of the following formula (2) and 3-  
hydroxyhexanoic acid of the following formula (3);



4. (Canceled)
5. (Previously presented) The transformant according to Claim 1 wherein the yeast is *Yarrowia lipolytica*.
6. (Canceled)
7. (Previously presented) The transformant according to Claim 1 wherein said promoter and said terminator function in the yeast.
8. (Previously presented) The transformant according to Claim 7 wherein the promoter and terminator are isolated from *Yarrowia lipolytica*.
9. (Currently amended) ~~The transformant according to Claim 7~~ A transformant wherein at least one gene expression cassette, comprising a polyester synthesis-associated enzyme gene, a promoter and a terminator, has been introduced into a yeast which belongs to any of the genera *Candida*, *Hansenula*, *Kluyveromyces*, *Phaffia*, *Pichia*, *Schizosaccharomyces*, *Schwanniomyces*, *Trichosporon*, and *Yarrowia*, and wherein the promoter is isolated from *Yarrowia lipolytica* ALK3 gene encoding an n-alkane-inducible cytochrome P450.
10. (Currently amended) The transformant according to Claim 7 wherein the terminator is isolated from *Yarrowia lipolytica* XPR2 gene encoding an alkaline extracellular protease.
11. (Previously presented) The transformant according to Claim 7 wherein the promoter and terminator are isolated from *Candida maltosa*.
12. (Currently amended) ~~The transformant according to Claim 7~~ A transformant wherein at least one gene expression cassette, comprising a polyester synthesis-associated enzyme gene, a promoter and a terminator, has been introduced into a yeast which belongs to any

of the genera *Candida*, *Hansenula*, *Kluyveromyces*, *Phaffia*, *Pichia*, *Schizosaccharomyces*,  
*Schwanniomyces*, *Trichosporon*, and *Yarrowia*, and

wherein the promoter is isolated from *Candida maltosa* ALK1 gene encoding an n-  
alkane-inducible cytochrome P450.

allow (13.) (Currently amended) ~~The transformant according to Claim 7~~ A transformant  
wherein at least one gene expression cassette, comprising a polyester synthesis-associated  
enzyme gene, a promoter and a terminator, has been introduced into a yeast which belongs to any  
of the genera *Candida*, *Hansenula*, *Kluyveromyces*, *Phaffia*, *Pichia*, *Schizosaccharomyces*,  
*Schwanniomyces*, *Trichosporon*, and *Yarrowia*, and

wherein the terminator is isolated from *Candida maltosa* ALK1 gene encoding an n-  
alkane-inducible cytochrome P450.

14. (Previously presented) The transformant according to Claim 1  
wherein the polyester synthesis-associated enzyme gene is isolated from *Aeromonas*  
*caviae*.

15. (Currently amended) The transformant according to Claim 1  
wherein the polyester synthesis-associated enzyme gene comprises a  
polyhydroxyalkanoate synthase gene isolated from *Aeromonas caviae* ~~or the~~  
~~polyhydroxyalkanoate synthase gene and a (R)-specific enoyl-CoA hydratase gene.~~

16. (Currently amended) The transformant according to Claim 15  
wherein said polyhydroxyalkanoate synthase gene has the sequence ~~represented by~~ of  
SEQ ID NO:3  
and the ~~(R)-specific enoyl-CoA hydratase gene has the sequence represented by~~ SEQ ID  
NO:4.

17. (Previously presented) A method of producing a polyester using the transformant  
according to Claim 1  
which comprises growing said transformant and harvesting a polyester from the

resulting culture.

18. (Currently amended) An isolated polyester synthesis-associated enzyme gene wherein at least one codon CTG is replaced with codon TTA, TTG, CTT, CTC or CTA, and said gene ~~functions~~ expresses its function in a yeast which translates the codon CTG into serine.

*enzyme  
functional protein*

19. (Previously presented) The polyester synthesis-associated enzyme gene according to Claim 18 which codes for an enzyme isolated from a bacterium.

20. (Original) The polyester synthesis-associated enzyme gene according to Claim 19 wherein said bacterium is *Aeromonas caviae*.

21. (Previously presented) The polyester synthesis-associated enzyme gene according to Claim 20 wherein the enzyme gene isolated from *Aeromonas caviae* is a polyhydroxyalkanoate synthase gene or a (R)-specific enoyl-CoA hydratase gene.

22. (Previously presented) The polyester synthesis-associated enzyme gene according to Claim 21 wherein said polyhydroxyalkanoate synthase gene has the sequence represented by SEQ ID NO:3.

23. (Original) The polyester synthesis-associated enzyme gene according to Claim 21 wherein said (R)-specific enoyl-CoA hydratase gene has the sequence represented by SEQ ID NO:4.

24. (Previously presented) The transformant according to Claim 1, wherein said yeast belongs to the genus *Yarrowia*.

25. (Canceled)

26. (New) A transformant

wherein at least one gene expression cassette has been introduced into a yeast, and  
said gene expression cassette comprises the polyester synthesis-associated enzyme gene  
according to claim 18.

27. (New) A method of producing a polyester using the transformant according to claim 26,  
which comprises growing said transformant and harvesting a polyester from the resulting  
culture.

28. (New) A transformant  
wherein at least one gene expression cassette has been introduced into a yeast belonging  
to the genus *Candida*, and  
said gene expression cassette comprises a polyester synthesis-associated enzyme gene  
isolated from a bacterium, a promoter isolated from a yeast belonging to the genus *Candida*, and  
a terminator isolated from a yeast belonging to the genus *Candida*.

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29. (New) The transformant according to claim 1  
the cassette comprising two polyester synthesis-associated enzyme genes, wherein a first  
of the two genes comprises a polyhydroxyalkanoate synthase gene isolated from *Aeromonas*  
*caviae* and a second of the two genes comprises a (R)-specific enoyl-CoA hydratase gene.

30. (New) The transformant according to Claim 29  
wherein the polyhydroxyalkanoate synthase gene has the sequence of SEQ ID NO:3 and  
the (R)-specific enoyl-CoA hydratase gene has the sequence of SEQ ID NO:4.